

## NSSL Acronym List

Acronym	Definition
A	Specific Attenuation
AERI	Atmospheric Emitted Radiance Interferometer
AMS	American Meteorological Society
ABI	Advanced Baseline Imager
AGL	Above Ground Level
AGU	American Geophysical Union
ARI	Average Recurrence Interval
ARRC	Advanced Radar Research Center
ART	Advanced Radar Techniques
ASOS	Automated Surface Observing System
ATD	Advanced Technology Demonstrator
AWC	Aviation Weather Center
AWAKEN	American Wake Experiment
AWIPS	Advanced Weather Interactive Processing System
AWS	Amazon Web Services
BAMS	Bulletin of the American Meteorological Society
BTS	Bureau of Transportation Statistics
CG	Cloud-to-Ground
C-SIGS	Convective SIGnificant Meteorology information
CAM	Convection-Allowing Model
CAPS	Center for Analysis and Prediction of Storms
CC	Correlation Coefficient (also represented as $\rho_{hv}$ )
CHEESEHEAD	Chequamegon Heterogeneous Ecosystem Energy-balance Study Enabled by a High-density Extensive Array of Detectors
CIMMS	Cooperative Institute for Mesoscale Meteorological Studies
CIWRO	Cooperative Institute for Severe and High-Impact Weather Research and Operations
CLEAN-AP	Clutter Environment Analysis using Adaptive Processing
CLAMPS	Collaborative Lower Atmospheric Mobile Profiling System
CLUE	Community Leveraged Unified Ensemble
CONUS	Contiguous/Conterminous United States
CREF	Composite Reflectivity
CWA	County Warning Area
DA	Data Assimilation
DARPA	Defence Advanced Research Projects Agency
DC3	Deep Convective Clouds and Chemistry Experiment
DOC	Department of Commerce
DOD	Department of Defense
DOE	Department of Energy
DOT	Department of Transportation
DP	Dual Polarization

DRARSR	Doppler Radar and Remote Sensing Research
EF	Enhanced Fujita Scale
EFM	Electric Field Meter
EFP	Experimental Forecast Program
EMC	Environmental Modeling Center
eMPE	Enhanced Multisensor Precipitation Estimator
EOL	Earth Observing Laboratory
EPIC	Environmental Profiling and Initiation of Convection
ESRI	Environmental Systems Research Institute
ESRL	Earth System Research Laboratories
EWP	Experimental Warning Program
FAA	Federal Aviation Administration
FACETs	Forecasting a Continuum of Environmental Threats
FAR	False Alarm Ratio
FFaIR	Flash Flood and Intense Rainfall
FFG	Flash Flood Guidance
FFW	Flash Flood Warning
FLASH	Flooded Locations & Simulated Hydrographs
fps	Frames Per Second
FV3	Finite Volume Cubed-Sphere (dynamical model core)
HCA	Hydrometeor Classification Algorithm
HMT	Hydrometeorology Testbed
hPa	Hectopascal
HREF	High-Resolution Ensemble Forecast (system)
HRRR	High-Resolution Rapid Refresh (model)
HyMeX	Hydrological Cycle in the Mediterranean Experiment
FOFS	Field Observing Facilities Support Division
FRDD	Forecast Research and Development Division
GEO-XO	Geostationary Extended Observations
GLM	Geostationary Lightning Mapper
GMAP	Gaussian Model Adaptive Processing
GOES	Geostationary Operational Environmental Satellite
GRA	Graduate Research Assistant
GSC	Grand Science Challenge
GSL	Global Systems Laboratory
HAFS	Hurricane Analysis and Forecast System
HCA	Hydrometeor Classification Algorithm
HMT	Hydrometeorology Testbed
HPC	High Performance Computing
HREF	High-Resolution Ensemble Forecast
HRRR	High-Resolution Rapid Refresh
HWT	Hazardous Weather Testbed
IDSS	Impact-based Decision Support Services
IOC	Initial Operating Capability

IPHEX	Integrated Precipitation and Hydrology Experiment
JEDI	Joint Effort for Data assimilation Integration
JPSS	Joint Polar Satellite System
JTTI	Joint Technology Transfer Initiative
K <sub>DP</sub>	Specific Differential Phase
KOUN	Norman/University of Oklahoma NOAA NWS WSR-88D Research Radar
KTLX	Oklahoma City / Twin Lakes NOAA NWS WSR-88D Radar
LCI	Labs and Cooperative Institutes
LEE	Lake-Effect Electrification Project
LES	Large Eddy Simulation
LLSD	Linear, Least Squares Derivative
LMA	Lightning Mapping Array
MAE	Mean Absolute Error
MCS	Mesoscale Convective System
MESH	Maximum Estimated Size of Hail
Metwatch	Weather Prediction Center's "Meteorological Watch" desk
MILLS	Microphysical Illumination of Large Lightning Study
MIT/LL	Massachusetts Institute of Technology's Lincoln Laboratory
ML	Machine Learning
MLDA	Melting Layer Detection Algorithm
MP	Megapixel
MPD	Mesoscale Precipitation Discussion
MPEX	Mesoscale Predictability Experiment
mPING	Meteorological Phenomena Identification Near the Ground
MRMS	Multi-Radar Multi-Sensor
MYRORSS	The Multi-Year Reanalysis of Remotely Sensed Storms
MWR	Microwave Radiometer
NASA	National Aeronautics and Space Administration
NCAR	National Center for Atmospheric Research
NCEP	National Centers for Environmental Prediction
NESDIS	National Environmental Satellite, Data, and Information Service
NEXRAD	Next Generation Weather Radar (see also WSR-88D)
NHC	National Hurricane Center
NIR	Near-Infrared
NOAA	National Oceanic and Atmospheric Administration
NOXP	NOAA X-band Polarimetric Mobile Radar
NSF	National Science Foundation
NSSL	National Severe Storms Laboratory
NWA	National Weather Association
NWP	Numerical Weather Prediction
NWRT	National Weather Radar Testbed
NWS	National Weather Service
O&M	Operations and Maintenance
O2R	Operations-to-Research

OAR	Oceanic and Atmospheric Research
OCONUS	Outside Contiguous United States
OKLMA	Oklahoma Lightning Mapping Array
OPG	Operations Proving Ground
OU	University of Oklahoma
PASIV	Particle Size, Image, and Velocity
PAR	Phased Array Radar
PARISE	Phased Array Radar Innovative Sensing Experiment
PB	Petabyte
PBL	Planetary Boundary Layer
PECAN	Plains Elevated Convection At Night
PECASE	Presidential Early-Career Award for Scientists and Engineers
PERILS	Propagation, Evolution and Rotation in Linear Storms
PHI	Probabilistic Hazard Information
POD	Probability of Detection
PRFO	Polarimetric Radar Forward Operator
PRT	Pulse Repetition Time
QC	Quality Control
QLCS	Quasi-Linear Convective System
QPE	Quantitative Precipitation Estimation
QPF	Quantitative Precipitation Forecast
R	Rain Rate
R2O	Research-to-Operations
R2O2R	Research-to-Operations-to-Research
R2X	Research-to-Applications
R&D	Research and Development
RA,SN,FZRA,PL	Rain, Snow, Freezing Rain, Ice Pellets
REU	Research Experience for Undergraduates
RF	Radio Frequency
RFI	Request for Information
RFP	Request for Proposals
RGB	Red-green-blue composite satellite images
RH	Relative Humidity
RiVorS	Rivers of Vorticity in Supercells Experiment
ROC	Radar Operations Center
RPG	Radar Product Generator
RPI	Radar Product Improvement
RQI	Radar QPE Quality Index
RRDD	Radar Research and Development Division
RRFS	Rapid Refresh Forecast System
S2S	Subseasonal to Seasonal
sfc	Surface
SBC	Spectral Bin Classifier
SBS	Social and Behavioral Sciences

SBES	Social, Behavioral, and Economic Sciences
SENSR	Spectrum Efficient National Surveillance Radar program
SFE	Spring Forecasting Experiment
SHV	Simultaneous Horizontal and Vertical
SLEA	Supplemental Low Elevation Angle
SLEP	Service Life Extension Program
SME	Subject Matter Expert
SNR	Signal-to-Noise Ratio
SPC	Storm Prediction Center
SPY-1A	Army Navy Joint Electronics Type Designation System
	<b>S</b> - Water (surface ship)
	<b>P</b> - Radar
	<b>Y</b> - Surveillance (target detecting and tracking) and Control (fire control and/or air control)
	Model number <b>1A</b>
SRF	Spectrum Relocation Funds
SZ-2	Sachindanada and Zrnic-2 (algorithm that reduces “purple haze”)
TAC	Technical Advisory Committee
THREDDS	Thematic Real-time Environmental Distributed Data Services
TIM	Threats-in-Motion
TORUS	Targeted Observation by Radars and UAS of Supercells
TOPO	Thunderstorm Orographic Preconditioning and Organization
TRACER	Tracking Aerosol Convection Interactions Experiment
TROPoe	Thermodynamic Remotely Observed Profiling by Optimal Estimation
TWIEP	Tornado Warning Improvement and Extension Program
UAS	Uncrewed/Unpiloted Aircraft System
UCAR	University Corporation for Atmospheric Research
UFS	Unified Forecast System
UGRA	Undergraduate Research Assistant
UH	Updraft Helicity
UK Met	United Kingdom Met Office
USGS	United States Geological Survey
UTC	Coordinated Universal Time
UW-CIMSS	University of Wisconsin-Cooperative Institute for Meteorological Satellite Studies
VCP	Volume Coverage Pattern
VHF	Very High Frequency
VORTEX	Verification of the Origins of Rotation in Tornadoes EXperiment (original in 1994)
VORTEX-2 (2009-2010)	Verification of the Origins of Rotation in Tornadoes EXperiment - 2
VORTEX-SE	Verification of the Origins of Rotation in Tornadoes EXperiment-Southeast
VPR	Vertical Profile of Reflectivity
VTOL	Vertical Takeoff and Landing

WDTD	NWS Warning Decision Training Division
WET	Weather Environment Thresholding
WFO	Weather Forecast Office
WMO	World Meteorological Organization
WPC	Weather Prediction Center
WoF	Warn-on-Forecast
WoFS	Warn-on-Forecast System
WRDD	Warning Research and Development Division
WRF	Weather Research and Forecasting
WSR-57	Weather Surveillance Radar 1957
WSR-88D	Weather Surveillance Radar 1988 Doppler (see also NEXRAD)
WTLMA	West Texas Lightning Mapping Array
Z	Radar Reflectivity
Z <sub>DR</sub>	Differential Reflectivity